



013004

04772  
U.S. PTO

PTO/SB/05 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032  
U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY  
PATENT APPLICATION  
TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

1875.5650000

First Inventor

Proano et al.

Title

System For Monitoring The Quality Of A  
Communications Channel With Mirror Receivers

Express Mail Label No.

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-145031353  
10/16/748  
U.S. PTO

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 20]  
(preferred arrangement set forth below)
- Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 5]
5. Oath or Declaration [Total Sheets 4]
- a. ☒ Newly executed (original or copy)
- b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)
- i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
name in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ Paper
- c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure ☒ Copies of IDS  
Statement (IDS)/PTO-1449 Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35  
or its equivalent.
17. ☒ Other: ..... Authorization under 37CFR 1.136(a)(3)  
The name of the assignee is: ..... Broadcom Corporation

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: .....

Prior application information: Examiner (to be assigned) Art Unit: (to be assigned)

For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

☒ Customer Number: 26111 OR ☐ Correspondence address below

Name	Sterne, Kessler, Goldstein & Fox P.L.L.C.		
Address			
City	State	Zip Code	
Country	Telephone	Fax	

Name (Print/Type)	Jeffrey T. Helvey	Registration No. (Attorney/Agent)	44,757
Signature		Date	1/30/04

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



013004

04772

U.S. PTO

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**FEE TRANSMITTAL  
for FY 2004**

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 810.00

**Complete if Known**

Application Number	(to be assigned)
Filing Date	(herewith)
First Named Inventor	Proano et al.
Examiner Name	(to be assigned)
Art Unit	(to be assigned)
Attorney Docket No.	1875.5650000

**METHOD OF PAYMENT (check all that apply)**☐ Check ☒ Credit card ☐ Money Order ☒ Other\*\* ☐ None☐ \*\*Charge any deficiencies or credit any overpayments in the fees to Deposit Acct. No. 19-0036.Deposit Account Number  
Deposit Account Name

19-0036

Sterne Kessler, Goldstein &amp; Fox P.L.L.C.

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments☐ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	770.00
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					770.00

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims 20 - 20 \*\* = 0 X      =     

Independent Claims 3 - 3 \*\* = 0 X      =     

Multiple Dependent      X      =     

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1202	18	2202	9	Claims in excess of 20	
1201	86	2201	43	Independent claims in excess of 3	
1203	290	2203	145	Multiple dependent claim, if not paid	
1204	86	2204	43	** Reissue independent claims over original patent	
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)					

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	2053	130	Non-English specification	
1812	2,520	2052	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	2052	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	2052	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	2451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	2460	130	Petitions to the Commissioner	
1807	50	2807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	2806	180	Submission of Information Disclosure Stmt	
8021	40	28021	40	Recording each patent assignment per property (times number of properties)	40.00
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	2802	900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 40.00

**SUBMITTED BY**

(Complete if applicable)

Name (Print/Type)	Jeffrey T. Helvey	Registration No. (Attorney/Agent)	44,757	Telephone	(202) 371-2600
Signature	<i>Jeff Helvey</i>	Date	1/30/04		

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



04/7/02 U.S. PTO

**Sterne Kessler  
Goldstein Fox**  
ATTORNEYS AT LAW

Robert Greene Sterne  
Edward J. Kessler  
Jorge A. Goldstein  
David K.S. Comwell  
Robert W. Esmond  
Tracy-Gene G. Durkin  
Michele A. Cimbala  
Michael B. Ray  
Robert E. Sokohl  
Eric K. Steffe  
Michael Q. Lee  
Steven R. Ludwig  
John M. Covert  
Linda E. Alcorn  
Robert C. Millonig  
Lawrence B. Bugalsky  
Donald J. Featherstone  
Michael V. Messinger

Judith U. Kim  
Timothy J. Shea, Jr.  
Patrick E. Garrett  
Heidi L. Kraus  
Edward W. Yee  
Albert L. Ferro\*  
Donald R. Banowitz  
Peter A. Jackman  
Molly A. McCall  
Teresa U. Medler  
Jeffrey S. Weaver  
Kendrick P. Patterson  
Vincent L. Capuano  
Eldora Ellison Floyd  
Thomas C. Fiala  
Brian J. Del Buono  
Virgil Lee Beaton  
Kimberly N. Reddick

Theodore A. Wood  
Elizabeth J. Haanes  
Joseph S. Ostroff  
Frank R. Cottingham  
Christine M. Uhliet  
Rae Lynn Prengaman  
Jane Shershenovich\*  
Lawrence J. Carroll\*  
George S. Bardmesser  
Daniel A. Klein\*  
Jason D. Eisenberg  
Michael D. Specht  
Andrea L. Kamage  
Tracy L. Muller\*  
LuAnne M. Yuricek\*  
John J. Figueroa  
Ann E. Summerfield  
Tiera S. Coston\*

Aric W. Ledford\*  
**Registered Patent Agents\***  
Karen R. Markowicz  
Nancy J. Leith  
Helene C. Carlson  
Gaby L. Longworth  
Matthew J. Dowd  
Aaron L. Schwartz  
Mary B. Tung  
Katrina Y. Pel Quach  
Bryan L. Skelton  
Robert A. Schwartzman  
Timothy A. Doyle  
Jennifer R. Mahalingappa  
Teresa A. Colella  
Jeffrey S. Lundgren

Victoria S. Rutherford  
Eric D. Hayes

**Of Counsel**  
Kenneth C. Bass III  
Evan R. Smith

\*Admitted only in Maryland  
\*Admitted only in Virginia  
\*Practice Limited to  
Federal Agencies

January 30, 2004

**WRITER'S DIRECT NUMBER:**  
(202) 772-8675

**INTERNET ADDRESS:**  
JHELVEY@SKGF.COM

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

**Mail Stop Patent Application**

Re: U.S. Non-Provisional Utility Patent Application under 37 C.F.R. § 1.53(b)  
Appl. No. (to be assigned); Filed: (herewith)  
For: **System For Monitoring The Quality Of A  
Communications Channel With Mirror Receivers**  
Inventors: Proano *et al.*  
Our Ref: 1875.5650000

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

1. PTO Fee Transmittal (Form PTO/SB/17);
2. PTO Utility Patent Application Transmittal (Form PTO/SB/05);
3. U.S. Utility Patent Application entitled:

**System For Monitoring The Quality Of A  
Communications Channel With Mirror Receivers**

and naming as inventors:

**Jay Proano  
Howard Baumer  
Chung-Jue Chen  
Ali Ghiasi  
Vasudevan Parthasarathy  
Rajesh Satapathy  
Linda Ying**

the application consisting of:

- a. An Application Data Sheet (37 C.F.R. § 1.76);
- b. A copy of an original executed Declaration;
- c. A specification containing:
  - i. Fourteen (14) pages of description prior to the claims;
  - ii. Five pages of claims (20 claims, 3 independent);
  - iii. A one (1) page abstract;
- d. Five sheets of drawings: (Figures 1, 2A-2B-2C, and 3-5);
4. Authorization to Treat a Reply As Incorporating An Extension of Time Under 37 C.F.R. § 1.136(a)(3);
5. Recordation Form Cover Sheet;
6. A copy of an original executed Assignment to **Broadcom Corporation**, recordation of which is hereby respectfully requested;
7. An Information Disclosure Statement (IDS);
8. Form PTO-1449 (one page) listing and accompanied by one document;
9. Two (2) return postcards; and
10. Form PTO-2038 Credit Card Payment Form.

Commissioner for Patents  
January 30, 2004  
Page 3

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible. The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Jeffrey T. Helvey  
Agent for Applicants  
Registration No. 44,757

JTH/sjc  
222881\_1.DOC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Proano *et al.*

Appl. No.: (to be assigned)

Filed: (herewith)

For: **System For Monitoring The  
Quality Of A Communications  
Channel With Mirror Receivers**

Confirmation No.: (to be assigned)

Art Unit: (to be assigned)

Examiner: (to be assigned)

Atty. Docket: 1875.5650000

**Authorization to Treat a Reply as Incorporating an  
Extension of Time Under 37 C.F.R. § 1.136(a)(3)**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

The U.S. Patent and Trademark Office is hereby authorized to treat any concurrent or future reply that requires a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. The U.S. Patent and Trademark Office is hereby authorized to charge all required extension of time fees to our Deposit Account No. 19-0036, if such fees are not otherwise provided for in such reply.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Jeffrey T. Helvey  
Agent for Applicants  
Registration No. 44,757

Date: 1/30/04

1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
(202) 371-2600

222883\_1.DOC